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ILLICIT DRUG TRAFFIC AND SUPPLY, INCLUDING REPORTS FROM THE SUBSIDIARY BODIES

Illicit drug trafficking

Report of the Secretariat

Summary

Global trends and recent developments in illicit drug trafficking are presented in the report. Trafficking in both heroin and cocaine increased rapidly in the 1980s, appeared to stabilize in the early 1990s and to increase in 1993 and 1994. While trafficking in cannabis herb still dominates the global situation with regard to trafficking in cannabis, trafficking in cannabis resin has been increasing and indoor cannabis cultivation continues to increase in many developed countries. Trafficking in methaqualone and other depressants appears to be more common in Africa and Asia.

The proportion of trafficked cocaine that was intercepted increased rapidly in the 1980s and was greater than the proportion of trafficked opiates that were intercepted. It is possible that one third or more of the cocaine that is trafficked is intercepted. However, the dynamics of trafficking are such that such a high seizure rate does not cause a proportional reduction in consumption. Further investigation of issues relating to the interception of the international illicit traffic and the role that it plays in reducing consumption and other drug-related problems may assist the Commission on Narcotic Drugs in its efforts to monitor the implementation of those provisions of the international drug control treaties relating to illicit trafficking, particularly those of the United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988.

*E/CN.7/1996/1.

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INTRODUCTION

1. The annual statistics that appear in the present document relate mainly to 1994, with information for 1995 given where available. Often information available on illicit drug trafficking is fragmentary. Analyses of illicit drug production or manufacture and trafficking, by necessity, rely only on estimates. Such estimates should not be treated as hard data and may be revised at a later date as new information becomes available.

2. Two other documents before the Commission on Narcotic Drugs at its thirty-ninth session contain information relating directly to illicit drug trafficking: amphetamine-type stimulants are reviewed in the report of the Secretariat on stimulants and the use of their precursors in the illicit manufacture of and trafficking in drugs (E/CN.7/1996/12); and the illicit cultivation of opium poppy, coca bush and cannabis plant is reviewed in the report of the Secretariat on crops from which drugs are extracted and appropriate strategies for their reduction (E/CN.7/1996/11).

3. The main quantifiable information relating to the illicit drug traffic consists of data related to drug production, seizures and consumption. Patterns and changes in seizure data can reflect different factors, including variation in the manner in which agencies report and record drug seizures; variation in law enforcement practices; and variation in exogenous factors. Where other factors hold constant, changes in seizure data can indicate changes in trafficking, and some inferences in the present report are based on that assumption.

I. OVERVIEW OF TRENDS

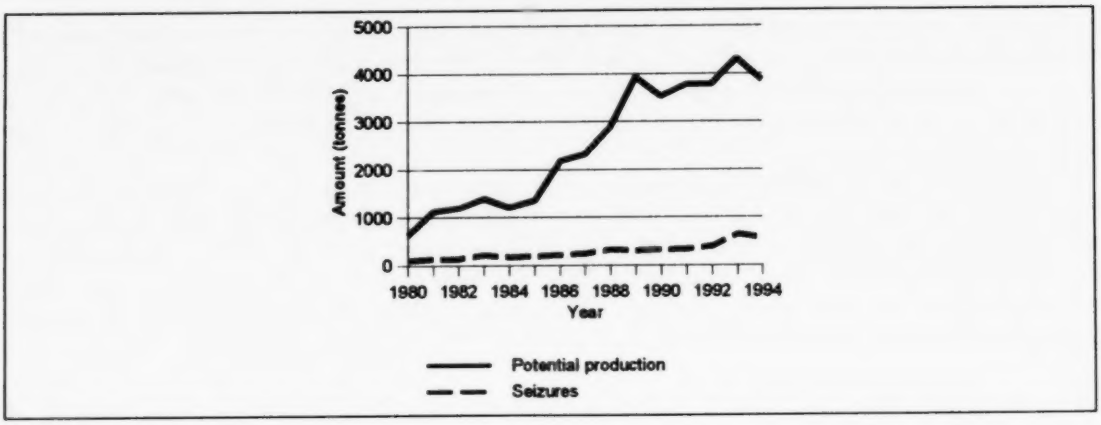
A. Opiates

4. Opium continues to be produced illicitly, mainly in three regions: south-east Asia, including the Lao People's Democratic Republic, Myanmar, Thailand and Viet Nam; south-west Asia, particularly Afghanistan and Pakistan; and Latin America, particularly Colombia and Mexico. Estimates of potential global opium production and global reported seizures are shown in figure 1 for the period 1980 to 1994. (Seized heroin and morphine are shown in opium equivalent to facilitate comparison with opium production.) The Customs Co-operation Council (also called the World Customs Organization) reported that the first eight months of 1995 brought considerable increases in the amount of opiates seized compared with the corresponding period in 1994, heroin and opium seizures being 60 per cent and 41 per cent greater respectively.[1]

5. The main changes in heroin manufacturing since 1980 have been the vast overall increases at the global level, mainly reflecting increases in Afghanistan and Myanmar, and the rapid increase in opium production and heroin manufacture in Colombia in the 1990s. In the 1990s there have been reports of illicit opium production also occurring in central Asia. Within the global trend there have been some specific instances of reduction in production and trafficking caused by reduced poppy cultivation, such as in Lebanon. These changes have had subsequent effects upon the volume and distribution of interregional heroin trafficking. The International Criminal Police Organization (ICPO/Interpol) anticipates increased heroin manufacture in the second half of the 1990s, driven by increased demand.[2]

6. Heroin is manufactured primarily within the opium-producing regions. This reduces the risks and costs of trafficking, since heroin is of higher value per unit weight than opium. Within those regions, opium is trafficked to clandestine manufacturing sites located where risks of detection are perceived to be the least.

Figure 1. Opium: global illicit production and seizures, 1980-1994



Sources: Annual reports questionnaires received by the Secretary-General; Customs Co-operation Council (also called the World Customs Organization); International Criminal Police Organization; and government sources.

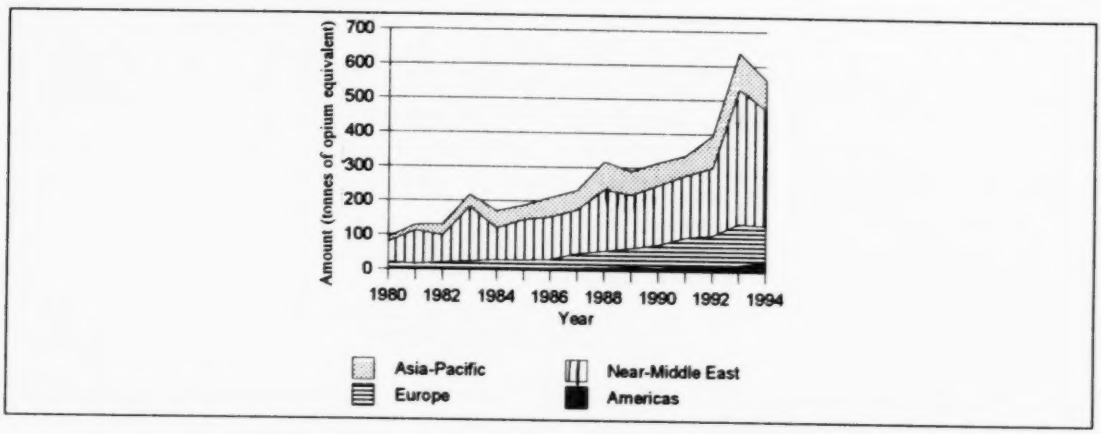
Note: Seized heroin and morphine are shown as opium equivalent.

7. International trafficking takes place between areas of production or manufacture and consumption, with south-west Asia supplying the bulk of the European market and south-east Asia and Latin America supplying the North American market. Seizure data suggest that between 80 and 90 per cent of heroin entering Europe between 1992 and 1994 came from south-west Asia and travelled through Turkey along the Balkan route[3] and that 57 per cent of heroin entering the United States of America in 1994 was from south-east Asia, 32 per cent was from South America, 6 per cent was from south-west Asia and 5 per cent was from Mexico.[4]

8. Changes in the regional distribution of seizures, shown in figure 2, give a composite indicator of changes in trafficking and law enforcement. While heroin is more commonly trafficked and seized internationally, heroin and morphine seizures are shown as opium equivalent in order to allow for aggregation. Only 92 tonnes of opium equivalent were seized in 1980, compared with nearly 642 tonnes in 1993. Opiate seizures appear high in 1993, owing to large amounts reported seized in the Islamic Republic of Iran and in Turkey. Of the 562 tonnes of opiates seized in 1994, 60 per cent was seized in the Near and Middle East, 19 per cent was seized in Europe, 16 per cent was seized in Asia and the Pacific and 5 per cent (or 28.1 tonnes) was seized in all of the Americas. From 1980 to 1994, only up to 5 tonnes in opium equivalent (less than one half of a tonne of heroin) were reported, for any given year, as seized in either Africa or the south Pacific, and in 1994 the two regions accounted for 1 per cent of the total amount seized.

9. Transit States are located (a) between producers or manufacturers and consumers or (b) as intermediaries on a more lengthy route perceived to be less risky. Turkey has long been cited as a major transit State on the Balkan route used by heroin traffickers. Countries in western Africa have been cited as transit States that have been used by criminal gangs from that subregion to transport illicit heroin consignments from Asia to the United States since the mid-1980s and, more recently, to transport illicit cocaine consignments from Latin America to Europe. As with much information relating to drug trafficking, it is difficult to quantify the significance of different aspects, owing to the nature of intelligence information and because seizure and arrest data reflect the emphasis of law enforcement efforts as well as drug trafficking. Given this limitation, some indications might be gleaned from data relating to arrests for drug trafficking where there are major illicit markets.

Figure 2. Opium:[a] seizures, by region, 1980-1994



Sources: Annual reports questionnaires received by the Secretary-General; Customs Co-operation Council (also called the World Customs Organization); and International Criminal Police Organization.

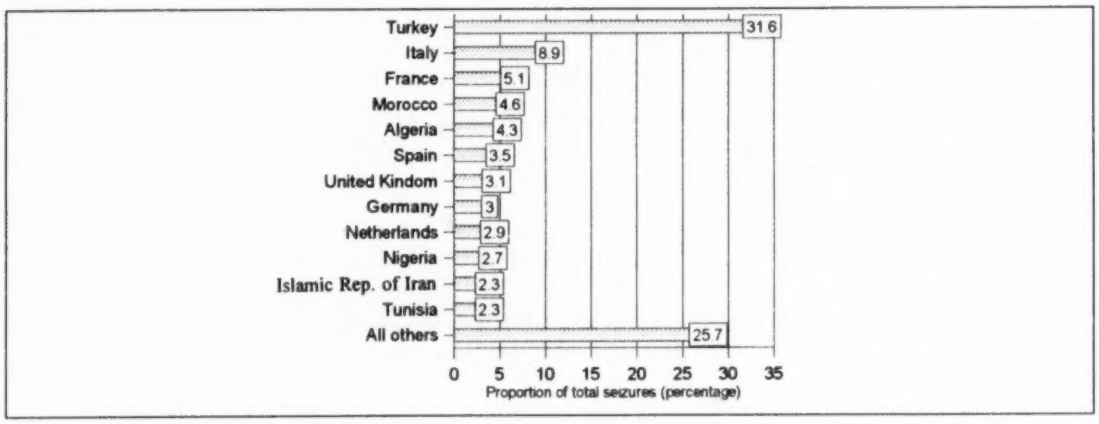
Note: Heroin and morphine are shown as opium equivalent.

[a]Excluding poppy plants and seeds.

10. Europe remained the principal point of destination for international heroin trafficking in 1994. Excluding seizures made during arrests for heroin possession, 40 per cent of heroin seizures involved the arrest of Europeans, 37 per cent involved the arrest of nationals of countries in the Near and Middle East, 22 per cent involved the arrest of Africans, 1 per cent involved the arrest of nationals of countries in the Americas and 1 per cent involved the arrest of nationals of countries in Asia and the Pacific. Distribution by country is highly skewed, Turkish nationals accounting for nearly 32 per cent of the arrested heroin traffickers (see figure 3). Some of those arrested were expatriate Turkish nationals, but intelligence reports of Istanbul being the major clearing-house for heroin destined for western Europe[5] conform with the pattern revealed by these data. Of the remaining non-European States, nationals of Morocco and Algeria were the next group most frequently arrested for trafficking. Nigerian nationals ranked tenth, accounting for less than 3 per cent of total heroin traffickers, followed by nationals of the Islamic Republic of Iran and Tunisia. With respect to European countries, heroin trafficking is dominated by nationals of France, Germany, Italy, Netherlands, Spain and United Kingdom of Great Britain and Northern Ireland. The representation of some countries in this picture may be artificially high in relation to actual trafficking, because of emphasis given by law enforcement, and the self-fulfilling nature of law enforcement profiling of traffickers (which varies in scientific validity with respect to actual trafficking).

11. Prices on illicit drug markets are an important indicator of the interaction between supply and demand. Figure 4 shows indexed trends in heroin retail prices (adjusted for inflation) and seizures in Europe from 1983 to 1994. European heroin seizures increased fivefold during that period, while global estimated opium production increased only around threefold. Heroin prices declined fairly steadily, however; in 1994 they were around 40 per cent of the 1983 price in real terms and purity levels were reported to be increasing. The suggestion is that illicit trafficking and supply increased quicker than illicit demand during that period. Wholesale prices followed trends similar to those of retail prices.

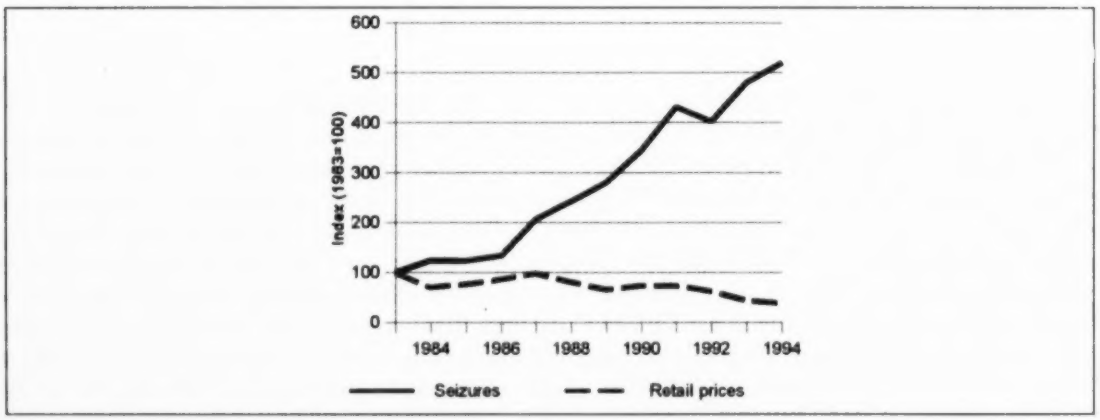
Figure 3. Heroin: traffickers arrested in Europe, by country of origin, 1994



Source: Significant seizures reported to the Secretary-General, the International Criminal Police Organization and the Customs Co-operation Council (also called the World Customs Organization).

Note: If more than one trafficker was arrested, the nationality of the majority of those arrested was used.

Figure 4. Heroin: seizures and retail prices in Europe, 1983-1994



Source: Annual reports questionnaires received by the Secretary-General.

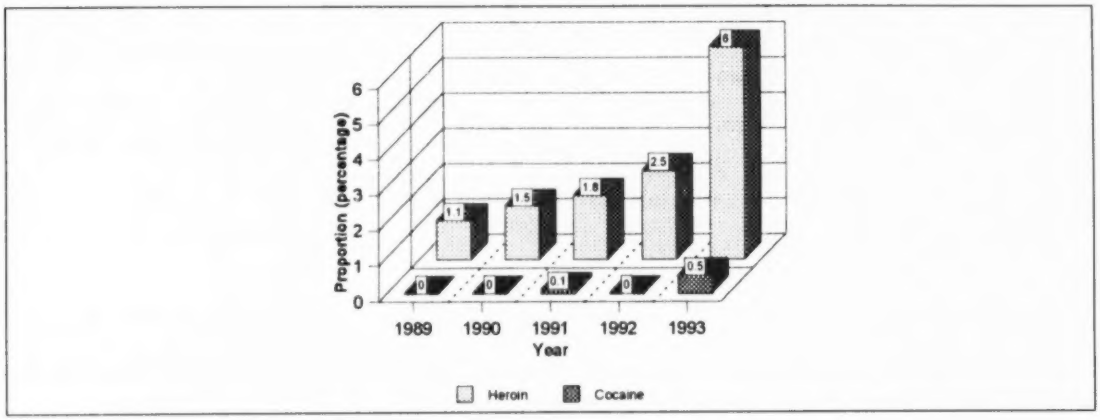
Note: Prices calculated as detailed in United Nations International Drug Control Programme, "Cocaine and heroin trafficking and prices in Europe, 1983-93", discussion paper, August 1994.

12. According to ICPO/Interpol, the area of the Persian Gulf was increasingly being used as a transit point for illicit heroin consignments *en route* to Africa and Europe in the first half of the 1990s. That was attributed to both the increased overall volume of air traffic in that area and the diversification of the trafficking routes used.

13. It appears that central Europe and eastern Europe are increasingly being used for stopovers by heroin couriers travelling by air from Asia. Those areas account for an increasing proportion of heroin and cocaine seizures made worldwide (as figure 5 shows for eastern Europe). Heroin seizures in central and eastern Europe have increased more markedly than cocaine seizures, as might be expected considering the

geographical proximity of those areas to major sources of heroin. The term "eastern European" as used here includes Armenia, Azerbaijan, Belarus, Bulgaria, Croatia, Czech Republic, Hungary, Kazakstan, Latvia, Lithuania, Poland, Romania, Russian Federation, Slovenia, the former Yugoslav Republic of Macedonia, Ukraine, Uzbekistan and Yugoslavia.

Figure 5. Heroin and cocaine: seizures in eastern Europe as a proportion of seizures worldwide, 1989-1993



Source: United Nations International Drug Control Programme, "The vulnerability of transition countries to drug trafficking, drug abuse and organised crime", discussion paper, October 1995.

14. The volume of vehicles and passengers moving to and from eastern Europe has increased greatly in recent years as a result of changing political and economic conditions. In 1993, the volume of traffic moving between Germany and its eastern neighbours, Austria, the Czech Republic and Poland, increased by 20 per cent, with the crossing of 1.6 million trucks, 33 million passenger cars, 240,000 buses and 140 million other means of transporting passengers.[6] Both the absolute volume and recent increases in trade and transportation make interdiction by random checks more difficult. Similarly, many recent trade agreements in different parts of the world, designed to increase trade and reduce border check requirements, and political developments such as those in eastern Europe, may have had an inadvertent effect of providing greater opportunities for illicit drug trafficking.

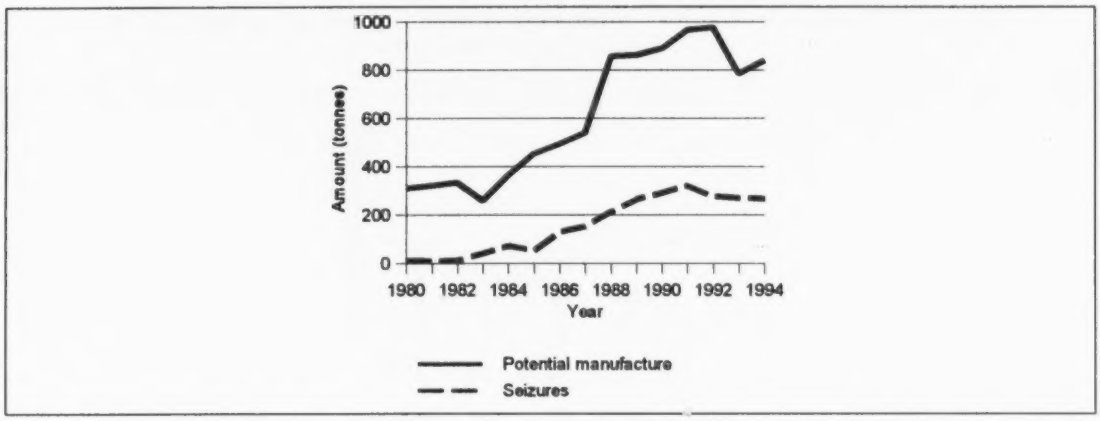
B. Cocaine

15. Estimated global cocaine manufacture and seizures are shown in figure 6 for the period from 1980 to 1994. (For potential cocaine manufacture, coca leaf production estimates were converted to cocaine equivalent to facilitate comparison with seizures.)

16. While some coca bush cultivation occurs in other Latin American countries, almost 50 per cent of all coca leaf production currently appears to be taking place in Peru, around 25 per cent in Bolivia and 25 per cent in Colombia. Many farmers manufacture coca paste in order to add value to the product before sale to intermediaries and traffickers who transport it, mainly to Colombia, for the manufacture of cocaine. However, the proportion of cocaine manufactured in Bolivia and particularly in Peru is increasing, owing (a) to the increased recognition of the greater profit to be made from cocaine manufacture and trafficking and (b) to the intensified government interception efforts at the borders between those countries. From its relatively concentrated manufacturing base, cocaine is transported to illicit markets in North America and, to a lesser extent, Europe by a variety of routes and methods, from different parts of Latin America.

Potential cocaine manufacture increased around fourfold between 1980 and 1992, but appeared to decline in 1993 and 1994.

Figure 6. Cocaine: global illicit manufacture and seizures, 1980-1994

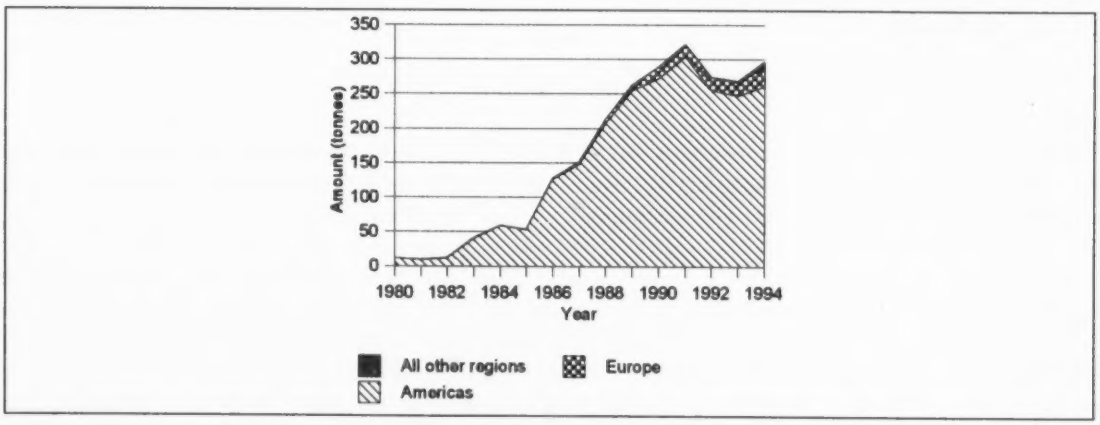


Sources: Annual reports questionnaires received by the Secretary-General; Customs Co-operation Council (also called the World Customs Organization); International Criminal Police Organization; and government sources.

Note: Seized coca leaf is shown as cocaine equivalent.

17. The regional picture of trafficking derived from seizure data, shown in figure 7, has been consistently highly skewed towards the Americas. In 1994, of the 290.3 tonnes of cocaine seized worldwide, 90 per cent was seized in the Americas and 10 per cent was seized in Europe. In Africa, Asia and the Pacific, and the Near and Middle East, 1 tonne of cocaine was seized in 1994, and over one half of that was seized in Australia.

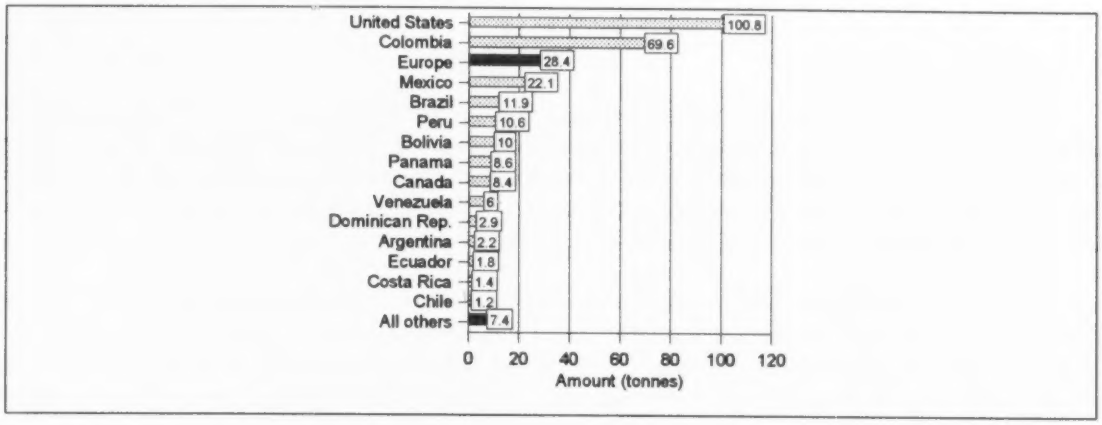
Figure 7. Cocaine: seizures, by region, 1980-1994



Sources: Annual reports questionnaires received by the Secretary-General; Customs Co-operation Council (also called the World Customs Organization); and International Criminal Police Organization.

18. Four countries accounted for around 80 per cent of the 290 tonnes of cocaine reported seized worldwide in 1994, as shown in figure 8. Colombia and the United States together accounted for 59 per cent of cocaine seized. Seizure figures reinforce intelligence reports that Brazil, Ecuador, Mexico, Panama and Venezuela are used as transit States for cocaine moving towards illicit markets in the United States and in countries in Europe; that the Dominican Republic is used for stopovers on the Caribbean transit route; and that Argentina is used as a transhipment point for cocaine *en route* to Europe. Consumption indicators also suggest that the United States remains the principal target for cocaine traffickers.

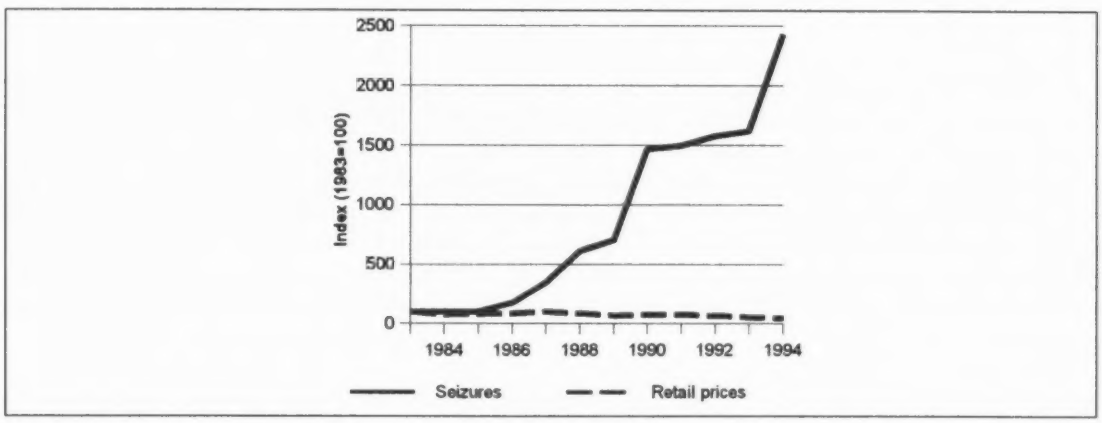
Figure 8. Cocaine: global seizures, 1994



Sources: Annual reports questionnaires received by the Secretary-General; Customs Co-operation Council (also called the World Customs Organization); and International Criminal Police Organization.

19. While the absolute amount of cocaine intercepted in Europe was far lower than that in the Americas, the amount reported to the Secretary-General increased quickly from 1985 onwards, stabilized somewhat between 1990 and 1993 and rose in 1994 to over 28 tonnes. Retail and wholesale prices of cocaine, in contrast, declined fairly steadily in a similar manner to those of heroin, as shown in figure 9. The European average real retail price of cocaine in 1994 was about 45 per cent of the 1983 price.

Figure 9. Cocaine: seizures and retail prices in Europe, 1983-1994



Source: Annual reports questionnaires received by the Secretary-General.

Note: Prices calculated as detailed in United Nations International Drug Control Programme, "Cocaine and heroin trafficking and prices in Europe, 1983-93", discussion paper, August 1994.

20. The recent arrests of most of the leaders of the Cali cartel, as a result of intensified efforts of the Government of Colombia, may prove to be a milestone in drug control efforts. While the impact of the arrests upon cocaine trafficking has not been evaluated at the time of preparation of the present report, the interruptions in cocaine manufacturing and trafficking are reported to have reduced coca leaf prices. The significant factors determining the impact of the arrests will be the extent and duration of the interruptions and whether, in the absence of a major cartel, cocaine trafficking will return to its previous levels.

21. According to the World Customs Organization, cocaine seizures in the first eight months of 1995 were 26 per cent lower than in the corresponding period in 1994.[7] It is possible that this could reflect a real reduction in cocaine manufacturing or trafficking or both.

C. Cannabis

22. Estimates of cannabis production and trafficking are less available than estimates of heroin and cocaine manufacture and trafficking. The reasons include the more dispersed nature of illicit cannabis cultivation; significant amounts of cannabis growing wild; extensive cannabis growth classifiable as stemming from previous licit hemp cultivation; the increasing prevalence of indoor cannabis cultivation; and the fact that there are fewer estimates of the major areas of outdoor cannabis growth.

23. According to estimates, in 1994 the major reported producer countries of cannabis grown outdoors were the countries in central Asia (cannabis plants covering an area totalling about 170,000 hectares); South Africa (82,734 hectares); and Morocco (over 50,000 hectares); Mexico (around 20,000 hectares). There are also significant areas of cannabis growth in Colombia, Jamaica and the United States. In addition, cannabis is grown to an unknown extent, and grows in the wild, in a large number of countries. The official United States government estimate of domestic cannabis production in 1993 was between 6,000 and 7,000 tonnes, which fell to around 3,500 tonnes in 1994. However, the fact that over 53,000 outdoor cannabis plots were eradicated in the United States in 1994, 72 per cent of which were classified as large and eradicated by chemical means, suggests that the hectarage of cultivation was large in the aggregate. There has been concern within the United States that if trends in cannabis cultivation continue, the United States could become a major exporter of cannabis.[8]

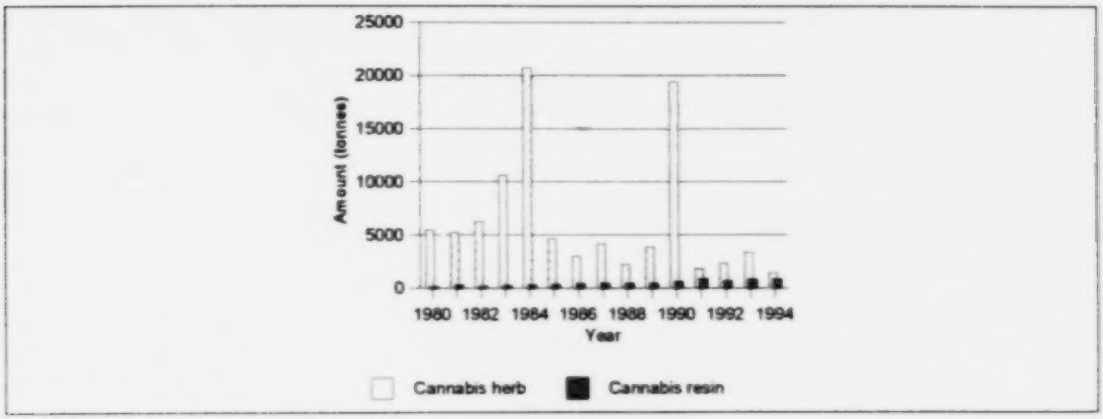
24. The cannabis growing in countries in central Asia reputedly has a low tetrahydrocannabinol (THC) content. Licit hemp production used to take place in those countries, and that is where much of the cannabis currently growing there has its origins. As a consequence, the contribution of those countries to the international illicit traffic in cannabis is small in spite of the fact that the total area covered by cannabis plants in central Asia is large.

25. The pattern of cannabis seizures since 1980, shown in figure 10, suggests that, at the global level, cannabis resin has increased in importance relative to cannabis herb. This is of note since cannabis resin is typically of higher THC content, per unit weight, than cannabis herb. Further investigation of the apparent decline in the amount of cannabis herb seized could prove informative and may reflect law enforcement practices. In 1994, less than 2 tonnes of liquid cannabis, 1,457.5 tonnes of cannabis herb and 868.3 tonnes of cannabis resin were reported seized. Cannabis resin and cannabis herb seizures made in 1994 are shown by region in figure 11. The proportions of cannabis resin and cannabis seized reflect trafficking from different sources to some extent, with Europe importing a higher proportion of cannabis resin originating in northern Africa.

26. Indoor cannabis cultivation is increasingly being reported in developed countries, principally for domestic consumption. Seizures of indoor cannabis operations in the United States tripled between 1988 and

1993.* Hydroponic techniques produce cannabis crops with high yield, and there have been reports of several strains of cannabis with a high THC content. More speculatively, if such trends in cannabis cultivation continue, it is possible that more competitively priced cannabis grown indoors in developed countries could reduce international trafficking in cannabis and could possibly even have an impact upon cannabis cultivation in the major cannabis-exporting countries. This may be an area worthy of further investigation.

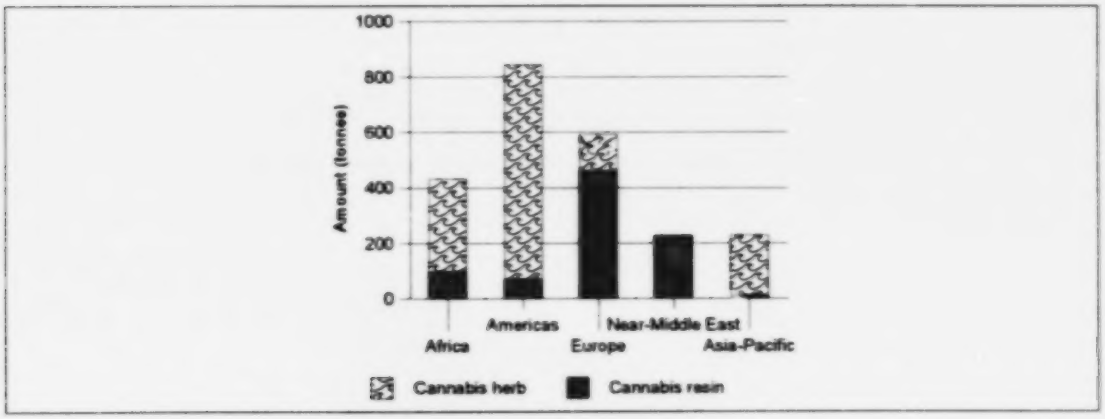
Figure 10. Cannabis resin and cannabis herb:[a] global seizures, 1980-1994



Source: Annual reports questionnaires received by the Secretary-General.

[a]Excluding plant, seeds and liquid.

Figure 11. Cannabis resin and cannabis herb:[a] seizures, by region, 1994



Source: Annual reports questionnaires received by the Secretary-General.

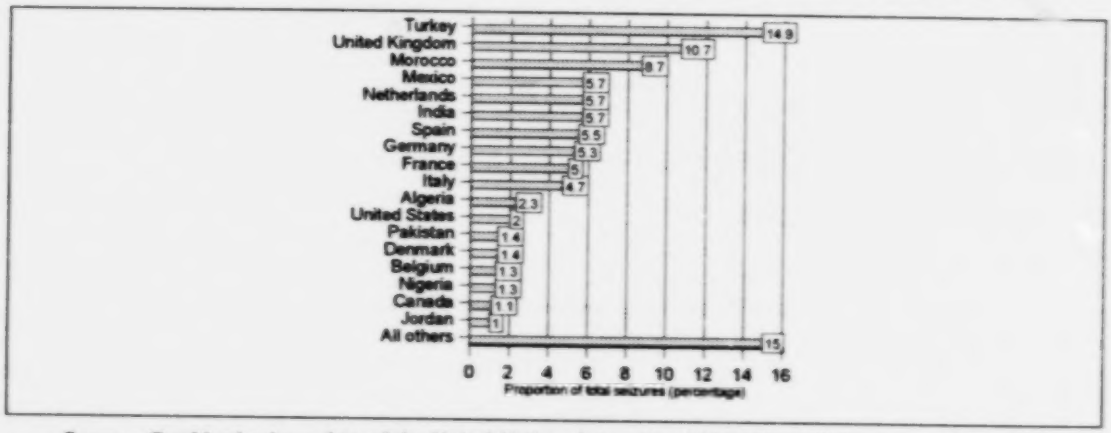
[a]Excluding plants, seeds and liquid.

*See the report of the Secretariat on crops from which drugs are extracted and appropriate strategies for their reduction (E/CN.7/1996/11).

27. According to a recent report of the South African Police Service,[9] South Africa may be the world's largest cannabis-producing country. A 1994 airborne survey estimated the total area under cannabis cultivation in that country to be over 82,000 hectares, mainly in the Eastern Cape. The estimated dry weight of the cannabis herb produced was over 180,000 tonnes. Around 30 per cent of the cannabis is reported to be consumed locally and the rest is reportedly transported by air and sea to European countries, in particular the Netherlands and the United Kingdom, and to the United States. Over 7,000 tonnes of cannabis plants were reported seized in South Africa in 1994. Cannabis cultivation in other parts of the African continent has not been subjected to similar surveys.

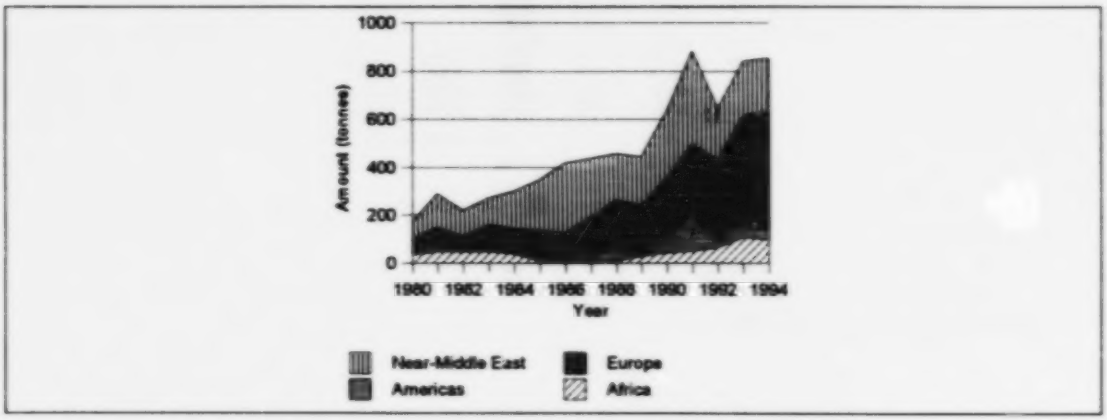
28. European traffickers accounted for around one half of the persons arrested worldwide in 1994 for trafficking in cannabis (see figure 12) and are reported to control much of the distribution of African cannabis resin in Europe. The proportion of cannabis resin seized worldwide that is accounted for by Europe has increased over the last decade, as shown in figure 13. According to ICPO/Interpol, Morocco was the source of one third of the 100 largest cannabis consignments seized worldwide in 1994, all of which were greater than 1 tonne, and Spanish authorities made the single largest cannabis seizure in that year - over 10 tonnes discovered on a fishing boat from Morocco. According to the World Customs Organization, cannabis seizures in the first eight months of 1995 appeared to be relatively similar, in terms of total weight, to those in the corresponding period in 1994.

Figure 12. Cannabis: traffickers arrested worldwide, by country of origin, 1994



Source: Combined seizure data of the United Nations International Drug Control Programme, the International Criminal Policy Organization and the Customs Co-operation Council (also called the World Customs Organization).

Figure 13. Cannabis resin: seizures, by region, 1980-1994



Source: Annual reports questionnaires received by the Secretary-General.

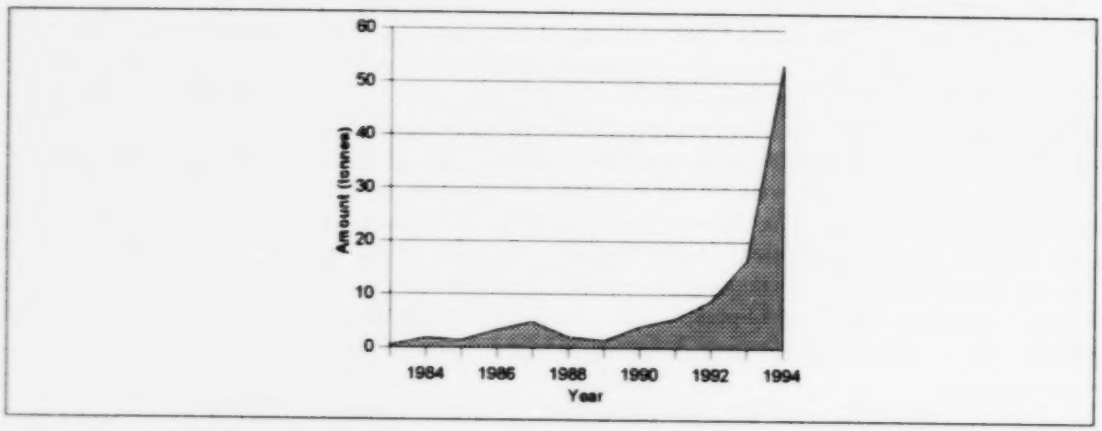
D. Psychotropic substances

29. There has been a strong increase in trafficking in stimulants in the 1990s. Past and present trends in the illicit traffic in amphetamine-type stimulants, including the methylenedioxymethamphetamine (MDMA) ("ecstasy") group, are discussed in the report of the Secretariat on stimulants and the use of their precursors in the illicit manufacture of and trafficking in drugs (E/CN.7/1996/12). Trends in trafficking in depressants and lysergic acid diethylamide (LSD) are briefly reviewed below.

Depressants

30. Global seizures of methaqualone and of other depressants in the period from 1983 to 1994 are shown in figures 14 and 15 respectively. Units and kilograms are reported separately for depressants other than methaqualone, since the form of preparation, the source of origin and the particular depressant to which they relate are not known. While there appears to have been, at the global level, an exponential increase in the weight of methaqualone reported seized in the 1990s and a surge in the amount of methaqualone and other depressants reported seized in 1994, this is concentrated among a small number of countries.

Figure 14. Methaqualone: global seizures, 1983-1994



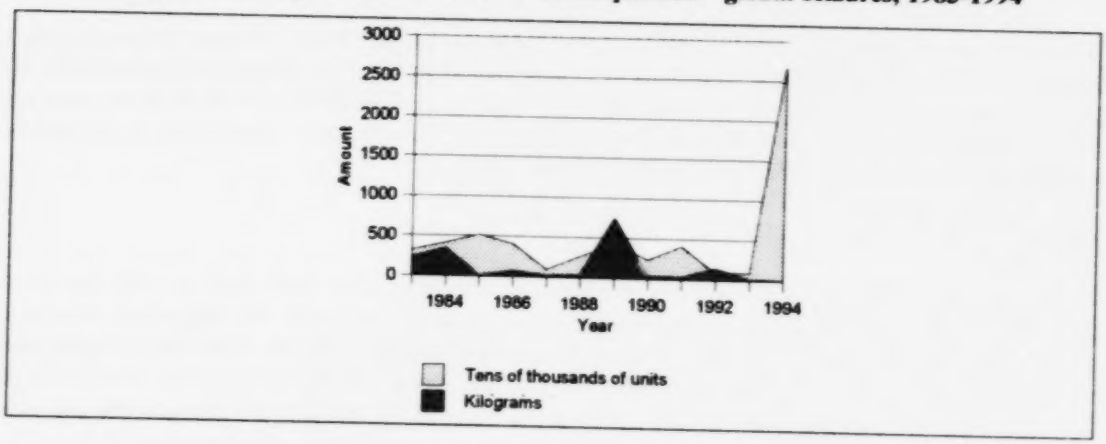
Source: Annual reports questionnaires received by the Secretary-General.

Note: Seizures reported in units have been converted to kilograms (and then to tonnes) using the following equation: 1 tablet or unit = 200 mg.

31. In 1994, India reported having seized 45 tonnes of methaqualone, 85 per cent of the total amount reported seized worldwide. The Phillippines reported having seized 7 tonnes of methaqualone in 1994, 13 per cent of the global total. While the remainder of the world accounted for only 2 per cent of the methaqualone seized worldwide, methaqualone trafficking by region may provide a better picture of the situation. Only 12 countries reported seizures of methaqualone to the Secretary-General for 1994, of which six were in Africa, two were in the Near and Middle East, one was in Europe and one was in North America.

32. For depressants other than methaqualone, in 1994 the United States reported the most units seized: over 25 million units, or 95 per cent of the total number of units seized worldwide. The United States was followed by Chad (slightly less than 500,000 units seized), Saudi Arabia (about 333,000 units seized), Japan (154,000 units seized), and the Bahamas (136,000 units seized). In 1994 seizures of such depressants were reported by more countries than seizures of methaqualone.

Figure 15. Depressants other than methaqualone: global seizures, 1983-1994

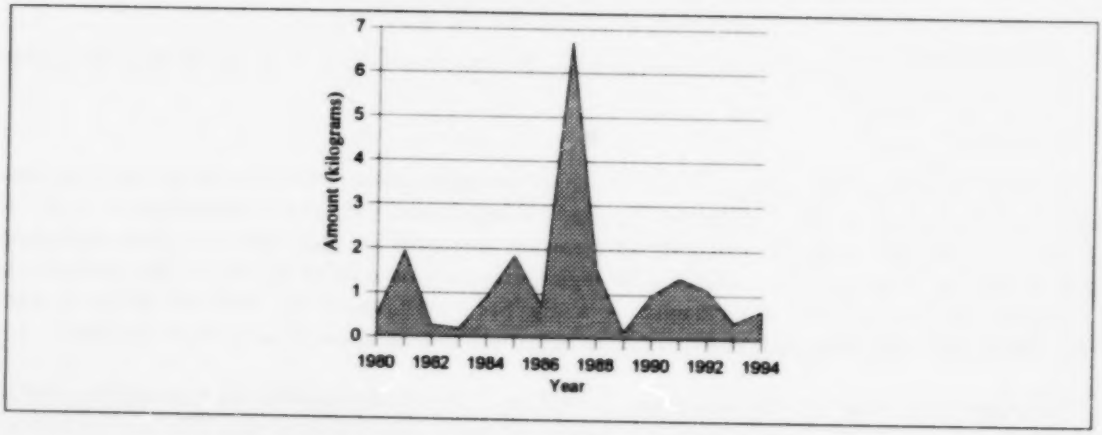


Source: Annual reports questionnaires received by the Secretary-General.

Lysergic acid diethylamide

33. Global seizures of LSD are shown in figure 16 for the period 1980 to 1994. It is difficult to draw conclusions regarding LSD trafficking from the seizure data, apart from the fact that there is no discernible trend. This is partly because the product is easy to disguise, and of extremely low bulk, making detection particularly difficult, while international trafficking in LSD is less prevalent than international trafficking in illicit drugs from natural products. In the case of LSD, reported seizures may be a more variable, and less reliable, indicator of trafficking than in the case of some other types of drugs. In 1994, LSD seizures were heavily concentrated in the following countries (listed in decreasing order): Israel, Canada, the United Kingdom and the United States (see figure 17). In addition, ICPO/Interpol reported that a significant but unknown quantity of LSD was seized in the Russian Federation.[10] Israel ranked first in reported LSD seizures, which was higher than its ranking for seizures of most other types of drugs; the same was to some extent true of Australia, Canada and South Africa. However, the partiality and variability of the data mean that these are not necessarily the principal countries involved in the illicit traffic in LSD.

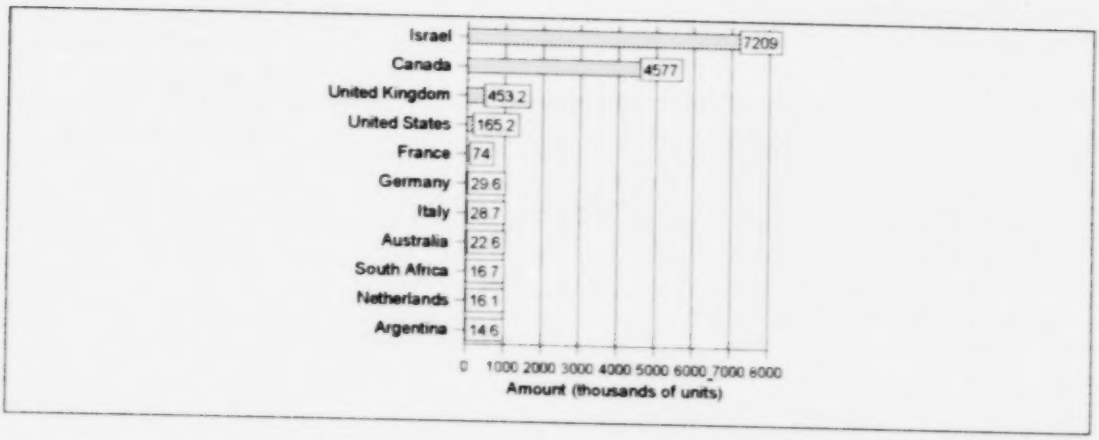
Figure 16. Lysergic acid diethylamide: global seizures, 1980-1994



Sources: Annual reports questionnaires received by the Secretary-General; and International Criminal Police Organization.

Note: Seizures reported in units have been converted to kilograms using the following equation: 1 unit = 50 mg (or 20,000 units = 1 g).

Figure 17. Lysergic acid diethylamide: seizures, by country, 1994



Sources: Annual reports questionnaires received by the Secretary-General; and International Criminal Police Organization.

Note: Only countries reporting having seized over 10,000 units are shown.

E. Precursors

34. The 22 precursors in Table I and Table II of the United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988[11] are substances that are frequently used in the illicit manufacture of drugs. Trafficking in substances used in the manufacture of the amphetamine-type stimulants and substances in the MDMA ("ecstasy") group is discussed in document CN.7/1996/12.

35. The traffic in substances used in the illicit manufacture of heroin and cocaine moves opposite to the traffic in the illicitly manufactured drugs, and sometimes along the same routes. Rather than provide a description of the geographical intricacies of precursor trafficking, the present subsection gives an overview of possible emerging global trends in such trafficking. The seizure data on precursors are those reported to the International Narcotics Control Board in relation to the implementation of article 12 of the 1988 Convention. Because the data are for a relatively small number of years and increasing adherence to the 1988 Convention changes reporting practices, the interpretation of the data is extremely tentative.

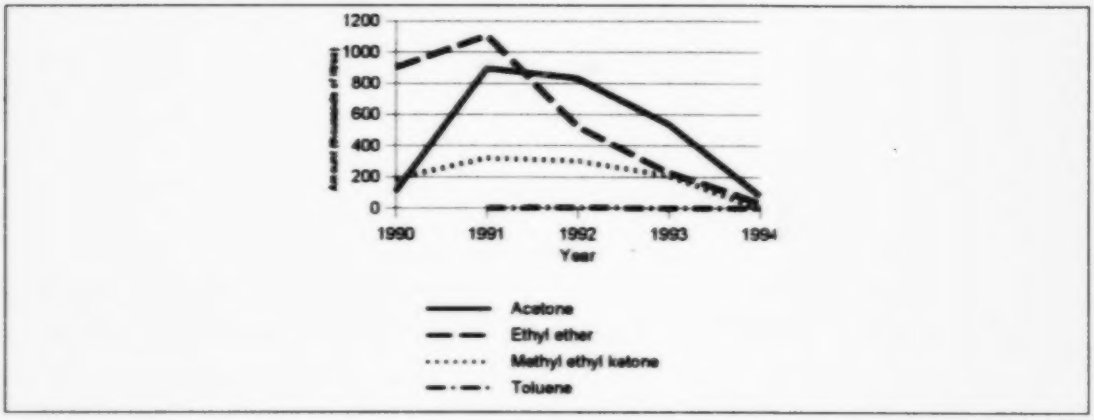
Substances used in the illicit manufacture of heroin and cocaine

36. The solvents used in the illicit manufacture of heroin and cocaine are acetone, ethyl ether, methyl ethyl ketone and toluene; the latter two were placed under international control only in 1992. The amounts of the solvents that have been reported seized have declined rapidly since they were placed under control, as shown in figure 18.

37. Hydrochloric acid and sulphuric acid are also used in the illicit manufacture of heroin and cocaine. Figure 19 shows amounts of hydrochloric and sulphuric acid reported seized between 1990 and 1994. Though those substances were not placed under international control until 1992, some of the data were collected retrospectively and the initial increases shown in figure 19 probably reflect this change in the data collection process. More recently, however, there appears to have been a drop in the amounts seized. When seizures of hydrochloric and sulphuric acid are aggregated, the reductions are even more pronounced. That is also true of seizures of the solvents, shown in figure 18, but the advantage of using the lower level of

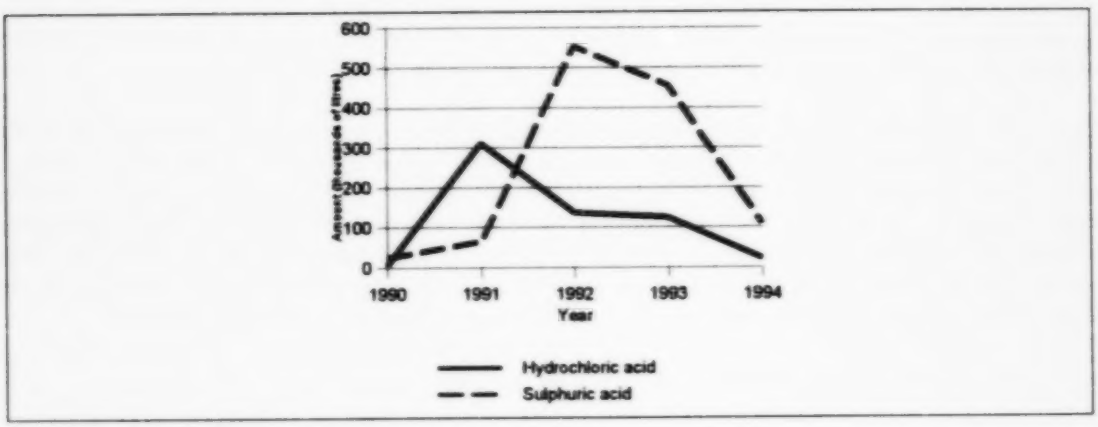
aggregation shown in figures 18 and 19 is that it demonstrates how the trend generally holds true for different precursors seized in different locations.

Figure 18. Solvents under international control: seizures, 1990-1994



Source: International Narcotics Control Board.

Figure 19. Hydrochloric acid and sulphuric acid: seizures, 1990-1994



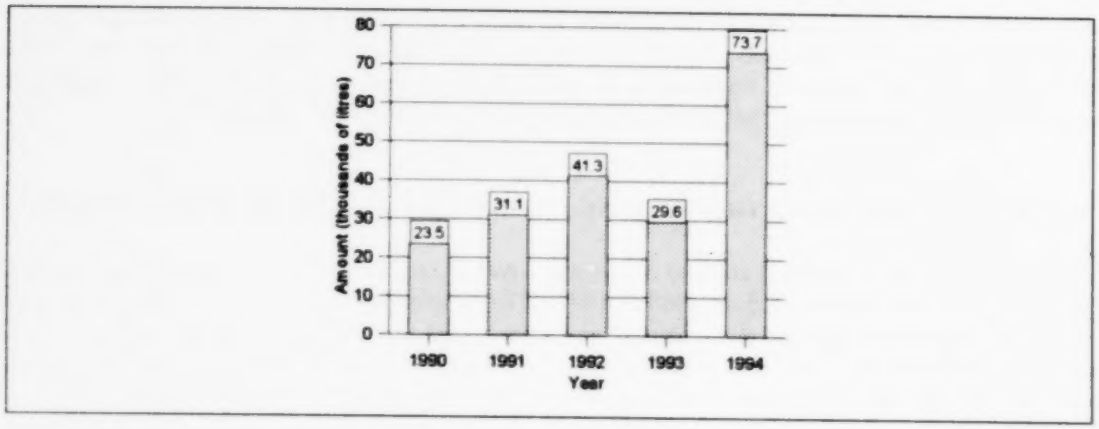
Source: International Narcotics Control Board.

38. The reductions in the amounts reported seized of both the solvents and the acids suggest four contending explanations. The first is that there may have been a reduction in illicit manufacture of heroin and cocaine, which is at odds with the evidence presented earlier in the present report. The second is that methods of illicit manufacture may have been adjusted so that smaller amounts of the precursors have been used; it has been suggested that the distilling and recycling of solvents may be taking place, as a technological response to restrictions on their availability. The third, and in many instances perhaps the more likely, explanation is that there may be a shift towards the use of substitute precursors; there are some reports that substitute solvents that are not under international control, such as methyl isobutyl ketone, which can be used in illicit cocaine manufacturing, are now being trafficked in larger amounts. A fourth interpretation is that the

amounts of the precursors being trafficked may not have changed; instead, the modus operandi and routes may have shifted to reduce the impact of tightened controls.

39. Acetic anhydride is used in the illicit manufacture of heroin and methaqualone. Seizures of acetic anhydride, shown in figure 20, in contrast with seizures of the solvents and acids discussed above, have increased in recent years. The increasing trend may reflect the targeting of acetic anhydride by law enforcement authorities. While there are substitutes for acetic anhydride, they are less readily available. Nevertheless, in south-west Asia there have been reports of suspicious movement and seizures of acetic acid, which is not under international control but is the precursor of acetic anhydride.

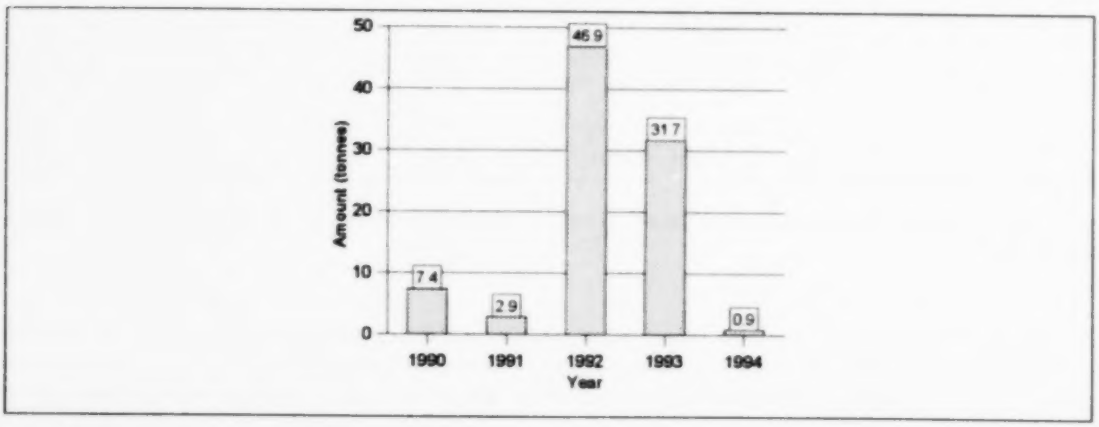
Figure 20. Acetic anhydride: seizures, 1990-1994



Source: International Narcotics Control Board.

40. Potassium permanganate is used in the illicit manufacture of cocaine from coca paste. The amount seized dropped sharply in 1994, as shown in figure 21, though the cause was unknown at the time of preparation of the present report. One advantage to having potassium permanganate under international control is that there are no available precursors of potassium permanganate, and the potential substitutes, such as hydrogen peroxide or even household bleach, while readily available, are less efficient.

Figure 21. Potassium permanganate: seizures, 1990-1994



Source: International Narcotics Control Board.

Substances used in the illicit manufacture of lysergic acid diethylamide

41. There were only five seizures of LSD precursors reported to the International Narcotics Control Board between 1990 and 1994: a single-gram seizure of ergotamine in 1990; a seizure of 300 grams of ergotamine in 1993; and three single-gram seizures of lysergic acid in 1993. It is difficult to draw conclusions regarding trafficking in these precursors, and the relatively small amounts that are required in the illicit manufacture of LSD make their detection difficult.

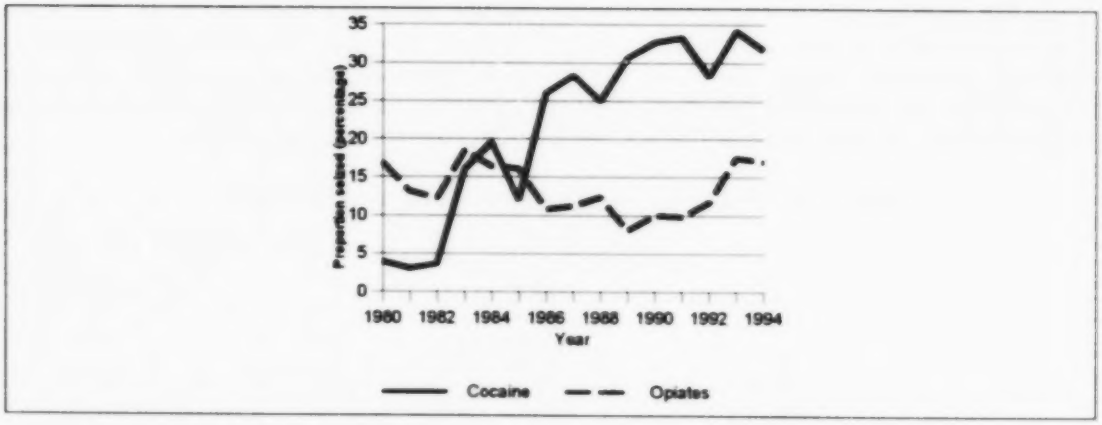
Substances used in the illicit manufacture of methaqualone

42. Prior to 1994, when 6 kilograms of *N*-acetylanthranilic acid were seized, there had been only one seizure of this precursor, of an unspecified amount in 1992, reported to the International Narcotics Control Board. Seizures of anthranilic acid are difficult to interpret in relation to trafficking, with no distinct pattern emerging from global seizures reported to the Board: nil in 1990, 389 kg in 1991, nil in 1992, 885 kg in 1993 and 102 kg in 1994. However, the trafficking in methaqualone precursors would be less prevalent if the main source of methaqualone in the illicit traffic were diversion from licit channels.

II. ACTION AGAINST DRUG TRAFFICKING: THE GLOBAL RATE OF INTERCEPTION

43. From the information in section I above it is possible to derive interception rates for opiates and cocaine, as shown in figure 22 for the period from 1980 to 1994. The interception rate presented is the percentage of the estimated opiates and cocaine manufactured that were seized (derived from figures 1 and 6). It is presented as a point-estimate, which is the mid-point of the estimated range for any given year, but which, when observed over an extended period of time, provides a relatively accurate picture of trends.

Figure 22. Opiates and cocaine: global interception rate estimates, 1980-1994



Source: United Nations International Narcotics Control Programme estimates derived from figures 1 and 6 in the present report.

44. As shown in figure 22, the global interception rate for heroin fell from around 15 per cent in 1980 to around 10 per cent, where it wavered as heroin trafficking increased from the mid-1980s to the early 1990s, and moved back to around 15 per cent in 1993 and 1994. The more recent increase could reflect a shifting of the balance of law enforcement resources towards efforts to reduce trafficking along the Balkan route. In contrast, the estimated interception rate for cocaine was much lower in the early 1980s, at less than 5 per

cent, after which it rose fairly consistently despite increased trafficking through the 1980s; it appears to have stabilized at around 30 per cent or higher in the 1990s. The differences between the interception rates for the two substances, the impact upon trafficking and consumption, and the possible policy implications are areas that deserve further investigation.

45. The difference between the interception rates, together with the increased cocaine interdiction rate, almost certainly reflect, in large part, greater emphasis on interception of international drug trafficking and the strengthening of law enforcement efforts within source countries. Between 1980 and 1994, the estimated global interception rate for cocaine increased around sixfold (see figure 22). In the same period, however, estimated cocaine manufacture tripled, and so the amount of cocaine that may have reached consumers almost doubled. The implication is that increases in drug trafficking and consumption cannot necessarily be attributed to a failure in law enforcement efforts.

46. Figure 22 suggests that, in the 1990s, around one third of the cocaine being trafficked is being intercepted. The impact upon the profitability of cocaine trafficking ought to be great. It seems rational to expect that, in time, the economic feasibility of cocaine trafficking will decline and that cocaine trafficking itself will decline along with it. The fact that such trafficking has not only continued but increased is contrary to that expectation. The most likely explanation is the huge variation in illicit drug prices in the stages between illicit production and consumption, since the bulk of the economic costs that interception efforts impose are absorbed prior to the retail distribution stage. The replacement costs of intercepted illicit drug consignments are low in relation to the profit that is made upon sale; and the wages of illicit drug couriers, while far higher than earnings to be made from licit alternatives, are small in comparison with the value of their cargo.[12] Consequently, replacement of intercepted international drug trafficking is highly likely. The interception of trafficking within source regions is attractive because shipments are larger and less dispersed than in the international traffic, though the proximity to the source means that the replacement costs of the drugs to traffickers are relatively small.

47. Rapidly increasing cocaine seizures are an indication of the immense efforts made by law enforcement agencies in the Americas in recent years. One constraint upon efforts to intercept international drug trafficking appears to be that, as some of the seized drugs are replaced, if illicit drug demand is not reduced through interception, then seizures may have the inadvertent effect of stimulating illicit cultivation. This, in turn, may diminish the impact that seizures of international trafficking might have upon illicit drug supply.

48. The reason that intercepted cocaine and heroin are replaced appears to be that, upon sale in developed countries, only a small fraction of the drugs trafficked covers the costs of the large amounts of drugs that are intercepted.* A kilo of cocaine in Colombia in 1992 cost around US$ 2,000, but had a wholesale price in the United States of US$ 11,000-42,000, and a retail value between US$ 100,000 and US$ 600,000. From such information, an interdiction rate required to drive drug trafficking out of the market might be estimated. If drug traffickers received only the middle of the range of the estimated wholesale price and each courier transported 1 kilogram of the drug and was paid US$ 4,000 per trip, only one trip would have to succeed for every three that failed in order for traffickers to break even. While prices vary over time and space, in this conservative example the interception rate would have to be at least 75 per cent to eliminate the economic viability of organized drug trafficking. This is almost certainly an underestimate. If any of the profit from retail sale returns to drug trafficking organizations, perhaps from connected cells of retail distributors, the profitability of international drug trafficking will be greater.

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*For further empirical evidence regarding the "value added" to illicit drugs between production and consumption, see the report of the Secretariat on crops from which drugs are extracted and appropriate strategies for their reduction (E/CN.7/1996/11).

49. The impact of interception efforts upon illicit drug consumption depends upon how responsive consumers are to price increases caused by reductions in illicit drug supply. It is well known that frequent drug users may be less responsive to price increases than new or casual drug users, particularly for dependence-producing drugs. Hence price increases may have only a small short-term impact, while the maintenance of longer-term reductions in illicit drug consumption are dependent upon trafficking not being able to adapt to replenish supply.

III. CONCLUSION

50. The global interdiction rate for cocaine is significantly above that for heroin, reversing the pattern of the early 1980s; that development is almost certainly due to greater law enforcement efforts. However, the mechanisms of the illicit market are such that the impact upon the amount of cocaine reaching consumers is less significant. Further exploration of these and related issues may assist the Commission on Narcotic Drugs in its efforts to monitor the implementation of those aspects of the international drug control treaties that relate to illicit drug trafficking.

51. Cannabis production and trafficking are less readily quantifiable than heroin and cocaine manufacture and trafficking. There is evidence suggesting that trafficking in cannabis resin has increased in recent years compared with trafficking in cannabis herb. It is possible that international trafficking in cannabis could decline if indoor hydroponic cultivation of cannabis for domestic consumption continues to increase in many developed countries. Further examination of the extent and importance of indoor cannabis cultivation might provide useful information in this respect.

52. There has been a dramatic increase in seizures of methaqualone and other depressants, which may indicate increased trafficking in those substances. While the extent to which different illicit drugs compete with one another is largely unknown, it is possible that increasing traffic in substances in the amphetamine-type stimulant group could have an impact upon cocaine trafficking in the longer term.

53. Trafficking in certain precursors may have declined in recent years, perhaps as a result of improved drug control efforts since the adoption of the 1988 Convention. There is a strong possibility, however, that this reflects a shifting towards the use of substitute products or other manufacturing techniques.

Notes

[1]World Customs Organization, "Report of the seventh meeting of the WCO joint customs/business working group on 'Action' (Alliance of Customs and Trade for the Interdiction of Narcotics) and 'Defis' (Douanes et enterprises face au trafic illicite de stupéfiants)", September 1995, annex II.

[2]International Criminal Police Organization, *Global Heroin Challenge: Changing Scenario, 1995* (1995), p. 1.

[3]International Criminal Police Organization, *The European Heroin Scene: Balkans; The New Corridors, 1994*.

[4]United States of America, National Narcotics Intelligence Consumers Committee, *The NNICC Report 1994: The Supply of Illicit Drugs to the United States* (August 1995), p. 31.

[5]International Criminal Police Organization, *Global Heroin Challenge* ..., pp. 8 and 16.

[6]Ibid., pp. 9-10.

[7]World Customs Organization, "Report of the seventh meeting of the WCO joint customs/business working group on 'Action' (Alliance of Customs and Trade for the Interdiction of Narcotics) and 'Defis' (Douanes et entreprises face au trafic illicite de stupéfiants)", September 1995, p. 1.

[8]United States of America, Department of Justice, Drug Enforcement Administration, Illicit Drug Trafficking and Use in the United States (September 1993), p. 15.

[9]South Africa, National Crime Investigation Service, *A Perspective of the Extent of the Cultivation and Trafficking of Cannabis (Dagga) in South Africa and the Combating of Cannabis Related Offences in the Region* (Pretoria, August 1995).

[10]International Criminal Police Organization, *National Statistics on Illicit Drug Production, Traffic and Use in 1994* (July 1995), p. 41.

[11]*Official Records of the United Nations Conference for the Adoption of a Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances, Vienna, 25 November-20 December 1988*, vol. I (United Nations publication, Sales No. E. 94.XI.5).

[12]See United Nations International Drug Control Programme, "Cocaine and heroin trafficking and prices in Europe, 1983-93", discussion paper, August 1994; P. Reuter and M.A.R. Kleiman, "Risks and prices: an economic analysis of drug law enforcement", *Crime and Justice: An Annual Review of Research*, M. Tonry and N. Morris, eds. (Chicago, University of Chicago Press 1986), vol. 7; and P. Reuter, *Quantity Illusions and Paradoxes of Drug Interdiction: Federal Intervention into Vice Policy* (Santa Monica, California, Rand Corporation, 1989).